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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/099,763      | 03/15/2002  | Dong-Hyang Lee       | 10969-012-999       | 4127             |

20583 7590 09/20/2005

JONES DAY  
222 EAST 41ST ST  
NEW YORK, NY 10017

EXAMINER

TOLENTINO, RODERICK

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2134

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|---------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/099,763  | <b>Applicant(s)</b><br>LEE, DONG-HYANG |  |
|                              | <b>Examiner</b><br>Roderick Tolentino | <b>Art Unit</b><br>2134                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☐ This action is FINAL.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/22/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

Claims 1 – 8 are pending.

***Claim Rejections - 35 USC § 112***

[001]

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

[002] Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

[003] Claim 1 uses the phrase “encrypted information” which is sent and encrypted to a client. However, in claim 5 the applicant uses the phrase “original message” as the information being encrypted and sent. It is indefinite as to whether these terms refer to the same information or different information. The term as best understood are referring to the same type of data therefore saying that the “encrypted information” is the “original message.”

[004] In claim 5 the applicant claims the step of “decompressing an original message.” However, the claims from which it is dependent on fail to disclose any form of compression of any information. Applicant fails to disclose a necessary step needed for invention.

***Claim Rejections - 35 USC § 102***

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[005]

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[006] Claim 1 rejected under 35 U.S.C. 102(e) as being anticipated by Parenty U.S.

Publication No. (2002/0071562)

As per claim 1 Parenty discloses generating a private encryption key and a public key for information encryption (Parenty, Fig. 2 Item 110), sending the generated public key and an encryption execution module to the client terminal (Parenty, Fig. 2, Item 300 and Item 410), executing the encryption execution module and the public key in the client terminal to encrypt the information and receiving the encrypted information from the client terminal (Parenty, Fig. 2, Item 530) and calling the generated private encryption key and decrypting the received encrypted information with the called private encryption key (Parenty, Fig. 4, Item 1400).

### ***Claim Rejections - 35 USC § 103***

[007] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[008] Claims 2, 3, 4/1, 4/2, 4/3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parenty U.S. Publication No. (2002/0071562) in view of Davis et al. U.S. Patent No. (6,038,549).

[009] As per claim 2 Parenty fails to disclose comparing the decrypted information with prestored and allowing or denying access the client according to a result of information authentication. However, Davis teaches comparing the decrypted information and with prestored (Davis, Fig. 22, item 2202) allowing or denying access the client according to a result of information authentication (Davis, Col. 29 Lines 9 – 13).

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to use user authentication with Parenty's system for encrypting documents for transit and storage because it offers the advantage of securing information without exposing the content or meaning of the message (Davis, Col. 1 Lines 59 – 61, secure messaging).

[010] As per claim 3 Parenty fails to disclose sending the decrypted information to a connectable financial payment institution server; and receiving payment approval result information from the financial payment institution server and sending to the client terminal the received payment approval result information. However, Davis teaches sending the decrypted information to a connectable financial payment institution server; and receiving payment approval result information from the financial payment institution

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server and sending to the client terminal the received payment approval result information. (Davis, Col. 13 Lines 9 – 29).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Davis' financial transaction method, with Parenty's system for encrypting documents for transit and storage because it offers the advantage of being able to perform business transactions. (Davis, Col. 1 Lines 25 – 29).

[011] As per claims 4/1, 4/2 and 4/3 Davis discloses public key is generated by calculating coordinates of a point on an elliptic curve with a private encryption key value of n bits and an elliptic curve initialization value. (Davis, Col. 2 Lines 64 – 67).

[012] As per claim 6 Parenty discloses generating a private encryption key and a public key for information encryption (Parenty, Fig. 2 Item 110), sending the generated public key and an encryption execution module to the client terminal (Parenty, Fig. 2, Item 300 and Item 410), executing the encryption execution module and the public key in the client terminal to encrypt the information and receiving the encrypted information from the client terminal (Parenty, Fig. 2, Item 530) and calling the generated private encryption key and decrypting the received encrypted information with the called private encryption key (Parenty, Fig. 4, Item 1400). Parenty fails to teach an implementation with at least one wireless terminal. However, Davis teaches the use of wireless terminals. (Davis, Col. 3 Lines 1 – 5)

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to connect to wireless terminals with Parenty's system for encrypting documents for transit and storage because it offers the advantage of keeping

a person connected to information while being mobile. (Davis, Col. 1 Lines 24 – 29, increased need for mobility).

[013] Claims 5/1, 5/2, 5/3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parenty U.S. Publication No. (2002/0071562) and Huded U.S. Patent No. (6,629,150) and in further view of Downs et al. U.S. Patent No. (6,226,618).

[014] As per claims 5/1, 5/2 and 5/3 Parenty as modified discloses decrypting an encryption compression key contained in the encrypted information with the called private encryption key (Parenty, Fig. 4, Item 1400, decrypting compression key).

Parenty fails to disclose decompressing an original message and a digest message with the decrypted encryption compression key, digesting the decompressed original message, and comparing the digested original message with the digest message and, if the digested original message and the digest are the same, decrypting the decompressed original message with the private encryption key. However, Huded teaches decompressing an original message and a digest message with the decrypted encryption compression key (Huded, Figure 8 Items 700 and 705, content decompression). Downs teaches digesting the decompressed original message (Downs, Fig. 4 Item 412, message digest), and comparing the digested original message with the digest message and, if the digested original message and the digest are the same, decrypting the decompressed original message with the private encryption key (Downs, Fig. 4 Items 412, 414 and 417, digest comparison).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use both Huded's digital decompression and Downs' method of digesting with Parenty's system for encrypting documents for transit and storage because it offers the advantage of secure delivery and control of usage of digital assets (Downs, Col. 3 Lines 4 – 6).

[015] As per claim 8 Parenty teaches encrypting the information entered from a client with the public key to generate an original message (Parenty, Fig. 2 Item 110, encryption) but fails to teach digesting the encrypted original message, compressing the original message and the digested original message with an encryption compression key under the condition that the encryption compression key is generated by randomly extracting a part of the public key and encrypting the encryption compression key with the public key having been used to encrypt the original message and compressed converting the compressed original message, the digested original message and the encrypted encryption compression key into Web documents and sending the Web documents. However Downs teaches digesting the encrypted original message (Downs, Fig. 4 Item 412, digesting), encrypting the encryption compression key with the public key having been used to encrypt the original message and compressed converting the compressed original message, the digested original message and the encrypted encryption compression key into Web documents and sending the Web documents (Downs, Col. 33 Lines 63 – 67, HTML) and Huded teaches compressing the original message and the digested original message with an encryption compression



key under the condition that the encryption compression key is generated by randomly extracting a part of the public key (Huded, Fig. 2 Item "Zip (Compress)).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Downs' digesting methods and HTML display and Huded's compression methods with Parenty's system for encrypting documents for transit and storage because it offers the advantage of secure delivery and control of usage of digital assets (Downs, Col. 3 Lines 4 – 6).

[016] Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parenty U.S. Publication No. (2002/0071562) and Davis et al. U.S. Patent No. (6,038,549), as applied to claim 6 above, and in further view of Huded U.S. Patent No. (6,629,150) and Downs et al. U.S. Patent No. (6,226,618).

[017] As per claim 7 Parenty as modified discloses decrypting an encryption compression key contained in the encrypted information with the called private encryption key (Parenty, Fig. 4, Item 1400, decrypting compression key). Parenty fails to disclose decompressing an original message and a digest message with the decrypted encryption compression key, digesting the decompressed original message, and comparing the digested original message with the digest message and, if the digested original message and the digest are the same, decrypting the decompressed original message with the private encryption key. However, Huded teaches decompressing an original message and a digest message with the decrypted encryption compression key (Huded, Figure 8 Items 700 and 705, content

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decompression). Both Parenty and Huded fail to teach digesting the decompressed original message, and comparing the digested original message with the digest message and, if the digested original message and the digest are the same, decrypting the decompressed original message with the private encryption key. However, Downs teaches digesting the decompressed original message (Downs, Fig. 4 Item 412, message digest), and comparing the digested original message with the digest message and, if the digested original message and the digest are the same, decrypting the decompressed original message with the private encryption key (Downs, Fig. 4 Items 412, 414 and 417, digest comparison).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use both Huded's digital decompression and Downs' method of digesting with Parenty's system for encrypting documents for transit and storage because it offers the advantage of secure delivery and control of usage of digital assets (Downs, Col. 3 Lines 4 – 6).

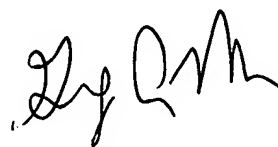
[018] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Tolentino whose telephone number is (571) 272-2661. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roderick Tolentino

Handwritten signature of Roderick Tolentino in black ink, with the initials "R/T" and "ATN" written below it.Handwritten signature of Gregory Morse in black ink.

GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
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